

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018468**Date Inspected:** 23-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 11DE/11EE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE11C-010, Side Plate transverse splice. The welder is identified as #053871 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR17543, UT repair.

Segment 11BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG068A-044, Side Plate to Bottom Plate splice. The welder is identified as #053871 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR2217, UT repair.

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Segment 11DW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG071B-052, Longitudinal Diaphragm horizontal stiffener to Floor Beam. The welder is identified as #046709 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1 for CWR2127, misalignment correction.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Li Yang and Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 11EE/11DE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Deck Plate transverse CJP splice and the Side Plate transverse CJP splice, bike path side. D scan was performed.

Segment 11AE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Light Bracket to Edge Plate and Deck Plate connection.

Segment 11BW/11CW

This QA Inspector observed fit up of the Counter Weight Assembly at panel points 100-102.

Segment 12AE

This QA Inspector observed beveling of the Deck Plate with the use of a mechanical guided torch, west end of segment.

Segment 11EE

This QA Inspector observed beveling of the Side Plate with the use of a mechanical guided torch, cross beam side at the east end of segment.

Segment 11EE

This QA Inspector observed tightening of high strength bolts with the use of a pneumatic impact wrench on the Side Plate WT stiffener splice plates, cross beam side between panel points 105.5 and 106.

Segment 11BW/Cross Beam 15

This QA Inspector observed match drilling of bolt holes in the Side Panel and FL3 with bolted splice plates at panel points 98 and 100.

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QA Verification

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC MT personnel. The following items were tested:

11CW/11DW

Deck Plate, Edge Plate I-rib and Bottom Plate WT stiffener hold back welds

EP121-001-011

EP121-001-012

EP122-001-007

EP122-001-008

SP665-001-023

SP665-001-024

SP666-001-017

SP666-001-018

BP106-001-053

BP106-001-054

BP107-001-041

BP107-001-042

BP053-001-043

BP053-001-044

BP054-001-031

BP054-001-032

BP161-001-051

BP161-001-052

BP162-001-039

BP162-001-040

SP683-001-029

SP683-001-030

SP684-001-029

SP684-001-030

EP139-001-011

EP139-001-012

EP140-001-013

EP140-001-014

DP693-001-013

DP693-001-014

DP694-001-007

DP694-001-008

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer
